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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
BROOKS, MATTHEW L

ART UNIT	PAPER NUMBER
3629	

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/021,084	CURTIS ET AL.
Office Action Summary	Examiner	Art Unit	
	Matthew L. Brooks	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10 April 2006_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-25_ is/are pending in the application.

　　4a) Of the above claim(s) _2 and 3_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 and 4-25_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _08 February 2001_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "maintaining business logic independent of access channels and resource implementations in the ..." must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. NOTE: Also Applicant is asked to point to the support for said limitation in originally filed specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Request for Information Under 37 CFR § 1.105

2.   This is a request that applicants provide certain information identified below. If applicants have this information, then applicants are <u>required</u>, under the provisions of 37 CFR 1.56, to disclose the information to the Office. A copy of 37 CFR 1.56 is enclosed for the convenience of the applicants.

3.   Applicants are <u>not</u> required or being asked to conduct a search for information beyond applicants own immediate files. If applicants do not have immediate knowledge of the information requested, then a statement that the information sought is unknown or not readily available to the applicants will be accepted by the office as a complete reply.

4.   **Why the Request for Information is Reasonably Necessary** - Applicant filed a 131 swearing behind the first applied reference Fabbricatore. In this declaration an Exhibit 1 was submitted. However information found with in the packet/exhibit leads examiner to many questions. Examiner has reason to believe that information in the packet was available to members of the public a full year before Applicants filing date. Indicators include: 1) on page 6, 4th full Paragraph Exhibit states "To date, more than 50 industry leaders have endorsed the J2EE platform."; 2) on pg 13, Exhibit talks of a real world example of a company using technology; 3) on page 14, first paragraph, Applicant speaks of a company "RedCelsius"; 4) Lastly and most importantly Applicant states on pg 15 "For additional information about any of the concepts, products, or services described in this document, please contact the Sun Professional Services organization, or visit our Web site at http://wwww.sun.com/sunps" Examiner has pulled this web site up on the "way back machine" and all indicators lead examiner to believe in good faith that the web site and many of its contents were available to the public. Applicants are being asked for the information pertaining to all *of the above mentioned points..*

5.   **Information Requested of Applicants**: Are you aware of (1) dates of the aforementioned Exhibit 1 was handed out and published, were confidentiality agreements signed, (2) Who are the 50 leaders are that endorsed the J2EE platform and why they did so, when did they do so and were the companies using said technologies in the manner claimed by Applicant; 3) on page 13 who/what is the "real world" example and when did they start using technology; 4) who or what; and what is your relationship with the company "RedCelcius"; 5) And most importantly what pertinent to this application information was posted on the aforementioned website; ALL ABOVE on or before 19 October 2001? The information of the aforementioned tests must be pertinent to that of use of enterprise/and legacy systems. If applicants' answer to this question is "Yes", applicants are required to identify the publication(s)/ requested information and the basis upon which applicants believe that these publications had this capability on or before 19 October 2001.

Claim Rejections - 35 USC § 112 1ˢᵗ

6.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7.   **Claims 1 and 4-25** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement and written description requirements. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Examiner is uncertain how the "orthogonal relationship" works and/or applies to components. Orthogonal relationships being an abstract concept without limits and merely stating that there is one, leaves one

of ordinary skill in the art with the burden of undue experimentation in determining how

all components relate.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 1 and 4-25 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in the test of:

whether the invention produces a useful, concrete, and tangible result.

The present invention fails the "useful, concrete, tangible" result test. For an invention

to be "useful" it must satisfy the utility requirement of section 101. The PTO's official

interpretation of the utility requirement provides that the utility of an invention has to be

(i) specific, (ii) substantial and (iii) credible. MPEP 2107. The claim must be for a

practical application that produces a useful result and the Applicant should specifically

recite in the claim the practical application. a claim that can be read so broadly as to

include statutory and nonstatutory subject matter must be amended to limit the claim to

a practical application. In other words, if the specification discloses a practical

application of an abstract idea, but the claim is broader than the disclosure such that it

recites an abstraction, then the claim must be rejected. In the present case Applicant

mentions in the specification merely that the relationship is orthogonal. See pg 4 for

instance the tiers, layers and systemic qualities have an orthogonal relationship, but

besides that none is taught. Orthogonal relationship persistence although known in the

art still remains as an ABSTRACT concept. Proof of this is provided in <u>Database</u>

<u>Theory-ICDT'99,</u> Table of contents "Orthogonal Persistent Platform for Java, also pg 2,

"...the abstract notion of orthogonal persistence..." See also <u>Computer-Aided Method</u>

<u>Engineering: Desingning Case Repositories for the 21</u><u>st</u> <u>Century;</u> Ajantha Dahanayke;

Jan. 1, 2001; pg 22 ""Platform and process integration is seen as orthogonal to data,

control and presentation integration. This multidimensional view of integration is

somewhat problematic. It is not clear what is meant by: "the dimensions are

orthogonal"..."""

This also lends to the argument that the "orthogonal relationship" is not going to

be concrete because the concept is too abstract.

Furtherstill due to the response the present invention lacks concreteness.

Usually concreteness arises when a result cannot be assured. In other words, the

process must have a result that can be substantially repeatable or the process must

substantially produce the same result again. <u>In re Swartz</u>, 232 F.3d 862, 864 (Fed. Cir.

2000) (where asserted result produced by the claimed invention is "irreproducible" claim

should be rejected under section 101). The opposite of "concrete" is unrepeatable or

unpredictable. Resolving this question is dependent on the level of skill in the art. For

example, if the claimed invention is for a process which requires a particular skill, to

determine whether that process is substantially repeatable will necessarily require a

determination of the level of skill of the ordinary artisan in that field. An appropriate

rejection under 35 U.S.C. § 101 should be accompanied by a lack of enablement

rejection under 35 U.S.C. § 112, paragraph 1, because the invention cannot operate as

intended without undue experimentation. *See infra.* In this regard Examiner turns to

the Specification to make out how the "orthogonal relationship works and how the

system components relate. No enabling disclosure is present. To determine this would

be to invent the invention due to all of the possible outcomes that could be expected

and the many hours of undue experimentation to determine the results and even still

another person skilled in the art may reward completely differently, hence the invention

lacks concreteness and is not enabled.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   The factual inquiries set forth in *Graham* v. *John Deere Co.,* 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

11.   **Claims 1 and 4-25** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Pub. No.: US 2003/0051226 (Zimmer), and further in view of Database Theory-

ICDT'99, (Springer).

First Examiner determines the scope ant contents of the prior art; to which Java

And its platform was known in the art along with the advantages of using in Enterprise

systems and orthogonal persistence in design was also known. The level of ordinary

skill in the art is that of a programmer.

12.   With respect to claims 1, 20 and 25: Zimmer teaches

separating services provided by the customer relationship management

architecture into tiers (Paragraph [0044], lines 7-12 "n-tier");

separating hardware and software that host services provided by the customer

relationship management architecture into layers ([0778], 7-11 "platform");

maintaining systemic qualities in each of the tiers and each of the layers([0044]

"integrate").

Furthermore Zimmer teaches using Java.

Arguably (as Applicant argues) Zimmer fails to teach "orthogonal relationship"

and maintenance of business logic separately.

However Springer teaches keeping an orthogonal relationship platform while

using Java (Table of contents and pg 5) in fact it teaches the benefits of using

orthogonal relationships on legacy systems just as taught by Applicants specification.

Further on pg 4 Springer teaches keeping the business logic separate because

otherwise it may be "obscured or distorted by the mechanisms for managing

persistence.

Thus it would be obvious for a programmer of ordinary skill in the art with

possession of Zimmer to implement the teaching of Springer because it teaches the

benefits and concepts of Java that should be implemented when building an information system. Just as it would be obvious for one of ordinary skill in art or task to read an information guide or textbook or instruction manual to learn how to do something or continue ones education.

13.   As for claim 4 and 22, ZIMMER discloses, wherein the tiers comprises at least one of the following: a client services tier, a presentation services tier, a business services tier, an integration services tier, and a resources services tier {Page 3, Paragraph [0044], Lines 12-18, wherein this reads over "Accordingly, the central application 30 provides the series of sub-applications 32, 34, 36 to be deployed on various tiers 14, 16, 26 for providing support for a selected combination of components contained in the tiers 14, 16, 26, which can be used by a company to integrate the selected components from the tiers 14, 16, 26 into one working solution on a variety of platforms"}. This appears as a resources services tier.

14.   As for claim 5, ZIMMER discloses the method of claim 4, wherein the client services tier resides on a client device and manages display and local interaction processing {Page 6, Paragraph [0064], Lines 19-20, wherein this reads over "These required to meet client needs"}.

15.   As for claim 6, ZIMMER discloses the method of claim 4, wherein the presentation services tier aggregates and personalizes content and services into channel-specific user interfaces {Page 4, Paragraph [0064], Lines 6-9, wherein this reads over "The parameters 44 can include a selection of middle tier technology 52,

which facilitates the separation of business logic of the application presiding in the middle tier 26 from the functionality of the interfaces in the first tier 14"}

16.   As for claim 7, ZIMMER discloses the method of claim 4, wherein the business services tier executes business logic and manages transactions {Page 4, Paragraph [0064 lines 6-9, wherein this reads over "The parameters 44 can include a selection of middle tier technology 52, which facilitates the separation of business logic of the application residing in the middle tier 26 from the functionality of the interfaces in the first tier 14"}.

17.   As for claim 8, ZIMMER discloses the method of claim 4, wherein the integration services tier abstracts and provides access to external resources {Page 6, paragraph [0063], Lines 7-11, wherein this reads over "Set up and implementation of the middle tier 26 components in the central platform application 30 can facilitate hiding details of running multiple transactions from users, as well as managing and pooling resources, to optimize system resources as well as scalability, reliability, and security"}.

18.   As for claim 9, ZIMMER discloses the method of claim 4, wherein the resources services tier comprises at least one of the following: legacy systems, databases, Lines 14-19, wherein this reads over "Database access or user interface devices 18 of the tier 14 can include various data communication devices, such as but not limited to desktops 18a, applets 18b, 18d, wireless hand held devices 18c, mobile computers, pagers, and other PDAs for accessing the data sources 20a, 20b located in the end tier 16"}.

19.   As for claim 10 and 23, ZIMMER discloses, wherein the layers comprises at least one of the following: a hardware platform layer a virtual platform layer, and an

application layer {Page 3, Paragraph [0043], Lines 30-34, wherein this reads over "It

should be noted that each of the middle tier 26 components 24, 28a, b includes a

selected platform or software 25, 29a, 29b for coordinating the distribution of the

data 20a, b from the end tier 16 to the device 18 of the first tier 14"}.

20.   As for claim 11, ZIMMER discloses the method of claim 10, wherein the

hardware platform layer comprises standard computer hardware and an operating

system for running the standard computer hardware {Page 3, Paragraph [0044], Lines

7-12, wherein this reads over "The central application 30 can contain a series of sub-

applications 32, 34, 36 which may or may not be in the same programming language or

customized for the same software platform or common hardware systems 18, 28, 20,

thereby helping to provide an end-to-end n-tier application 30"}.

21.   As for claim 12, ZIMMER discloses the method of claim 10, wherein the virtual

platform layer comprises standard application program interfaces (APIs) and

specifications interfacing the hardware platform layer with the application layer {Page 2,

Paragraph I   architecture, wherein virtual instructions are executed by converting

them into real instructions which can be executed on the actual machine"}.

22.   As for claim 13, ZIMMER discloses the method of claim 10, wherein the

application layer comprises application programs {Page 15, Paragraph [0358], Lines

15-23, wherein this reads over "it should be noted that the above XML code description

of the sample user interface 58 contains a series of platform independent widgets

60a,b,c that are represented by the entities contained in the file 38, through which the

program generator 42 can use to generate the application 30 on a variety of platforms,

which are dependent upon the type of parameters 50, 52, 54 that are specified by the

program designer"}.

23.   As for claim 14 and 24, ZIMMER discloses, wherein the systemic qualities

comprises at least one of the following: agility, availability, scalability, reliability, and

manageability {Page 4, Paragraph [0046], Lines 10-12, wherein this reads over

"Security, scalability, and reliability parameters can be designed into the application 30

using these input parameters 52"}.

24.   As for claim 15, ZIMMER discloses the method of claim 14, wherein the agility

systemic quality is characterized by its ability to functionally accept at least one of the

following: development without the aid of a software vendor, to be updated without the

aid of a software vendor, and to be customized without the aid of a software vendor

{Page 3, Paragraph [0044], Lines 12-18, wherein this reads over "Accordingly, the

central application 30 provides the series of sub-applications 32, 34, 36 to be deployed

on various tiers 14, 16, 26 for providing support for a selected combination of

components contained in the tiers 14, 16, 26, which can be used by a company to

integrate the selected components from the tiers 14, 16, 26 into one working solution on

a variety of platforms"}.

25.   As for claim 16, ZIMMER discloses the method of claim 14, wherein the

availability systemic quality at least comprises to ability to support stateful sessions

{Page 3, Paragraph [0044], Lines 12-18, wherein this reads over "Accordingly, the

central application 30 provides the series of sub-applications 32, 34, 36 to be deployed

on various tiers 14, 16, 26 for providing support for a selected combination of

components contained in the tiers 14, 16, 26, which can be used by a company to

integrate the selected components from the tiers 14, 16, 26 into one working solution on

a variety of platforms"}.

26.   As for claim 17, ZIMMER discloses the method of claim 14, wherein the

scalability systemic quality at least comprises the ability to support unpredictable surges

in demand for network services {Page 3, Paragraph [0044], Lines 12-18, wherein this

reads over "Accordingly, the central application 30 provides the series of sub-

applications 32, 34, 36 to be deployed on various tiers 14, 16, 26 for providing support

for a selected combination of components contained in the tiers 14, 16, 26, which can

be used by a company to integrate the selected components from the tiers 14, 16, 26

into one working solution on a variety of platforms"}.

27.   As for claim 18, ZIMMER discloses the method of claim 14, wherein the reliability

systemic quality is characterized by its ability to functionally accept standard application

program interfaces (APIs) that have been tested for reliability {Page 4, Paragraph

[0046], Lines 10-12, wherein this reads over "Security, scalability, and reliability

parameters can be designed into the application 30 using these input parameters 52"}.

28.   As for claim 19, ZIMMER discloses the method of claim 14, wherein the

manageability systemic quality is characterized by its ability to functionally accept

desirable hardware and software components and integrate them into the customer

relationship management architecture {Page 24, Paragraph [0778], Lines 7-11, wherein

this reads over "This integrated operational structure is supplied by the subprograms

32,34, 36 of the application 30, which can be generated for a selected combination of

hardware/software platforms in the tiers 14, 16, 26 according to the file 38 parameters

40, 44, as processed by the generator 42"}.

Response to Arguments

29.   Applicant's arguments with respect to claim 1 and 4-25 have been considered but

are moot in view of the new ground(s) of rejection. Note though the bulk of the

arguments that of "orthogonal relationship" has been addressed.\

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew L. Brooks whose telephone number is (571)

272-8112. The examiner can normally be reached on Monday - Friday; 8 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Weiss can be reached on (571) 272-8112. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MLB
10/30/2006

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